

IN THE CLAIMS

B1 Sub C1
1. (Currently Amended) An apparatus for recovering a failed database data set, the apparatus comprising:

a memory device storing executable modules, the modules comprising:

a recovery utility having,

a backup copy restore utility configured to read and restore a backup copy of the database data set;

a merge end point utility configured to determine the merge end point reflective of a separation of detail and spill records in a log;

a change accumulation manager configured to read the a change accumulation data set to derive detail records in parallel with the read and restore of the backup copy; and

an image copy restore utility configured to apply the detail records to the backup copy during the read and restore of the backup copy to thereby create a restored database data set:-

a log manager configured to read a log to derive updates subsequent to a merge end point; and

a database update manager configured to apply the updates to the restored database data set.

2. The apparatus of claim 1 wherein the backup copy restore utility is further configured to read and restore a plurality of backup copies in parallel.

3. The apparatus of claim 1 wherein the change accumulation manager is further configured to read in parallel a plurality of change accumulation data sets to derive detail records.

4. (Cancelled)

5. (Cancelled)

Sub C27

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6. (Currently Amended) The apparatus of claim 5-1, wherein the log manager is further configured to read a plurality of logs in parallel to derive updates subsequent to the merge end point.

7. (Currently Amended) The apparatus of claim 5-1, wherein the database update manager is further configured to apply the updates after the backup copy is restored.

8. The apparatus of claim 1 further comprising a virtual memory and wherein the change accumulation manager is further configured to store at least a portion of the detail records in the virtual memory.

9. The apparatus of claim 1 wherein the backup copy restore utility is configured to send a query to the change accumulation manager for a detail record associated with the database data set during the read and restore of the backup copy.

10. The apparatus of claim 9 wherein the change accumulation manager is configured to save the query if the detail record has not yet been read by the change accumulation manager and further configured to send the detail record to the image copy restore process if the detail record has been read by the change accumulation manager.

11. (Previously Amended) A method for recovering a failed database data set, the method comprising:

reading and restoring a backup copy of the database data set;

reading a change accumulation data set to derive detail records associated with the database data set in parallel with the reading and restoring of the backup copy;

applying the detail records to the backup copy during the reading and restoring of the backup copy to thereby create a restored database data set; and

determining a merge end point within a log and reading the log to derive updates subsequent to the merge end point and applying the updates to the restored database data set.

12. The method of claim 11 further comprising reading and restoring a plurality of

B1

backup copies in parallel, wherein the backup copies are associated with corresponding failed database data sets.

13. The method of claim 11 further comprising reading a plurality of change accumulation data sets in parallel to derive detail records.

14. (Cancelled)

SUB C37

15. (Previously Amended) The method of claim 11 wherein reading the log and applying the updates are executed after restoring the backup copy.

16. The method of claim 11 further comprising reading a plurality of logs in parallel to derive updates subsequent to the merge end point and applying the updates to the restored database data set.

17. The method of claim 11 further comprising determining the merge end point, wherein the merge end point is reflective of a separation of detail and spill records in the log.

18. The method of claim 11 further comprising storing at least a portion of the detail records in a virtual memory.

19. The method of claim 11 further comprising generating a query to prompt for a detail record associated with the database data set.

20. The method of claim 19 further comprising saving the query if the detail record has not yet been read and responding to the query by applying the detail record to the backup copy if the detail record has been read.

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21. (Previously Amended) A computer readable medium having stored thereon computer executable instructions for performing a method for recovering a failed database data, the method comprising:

reading and restoring a backup copy of the database data set;

reading a change accumulation data set to derive detail records associated with the database data set in parallel with the reading and restoring of the backup copy;

applying the detail records to the backup copy simultaneously during the reading and restoring of the backup copy to thereby create a restored database data set; and

determining a merge end point within a log and reading the log to derive updates subsequent to the merge end point and applying the updates to the restored database data set.

22. (Omitted)

Sub C47
23. (Currently Amended) The computer readable medium of claim 22-21 wherein the method further comprises reading and restoring a plurality of backup copies in parallel, wherein the backup copies are associated with corresponding failed database data sets.

24. (Currently Amended) The computer readable medium of claim 22-21 wherein the method further comprises reading a plurality of change accumulation data sets in parallel to derive detail records.

25. (Cancelled)

Sub C57
26. (Previously Amended) The computer readable medium of claim 21 wherein reading the log and applying the updates are executed after restoring the backup copy.

27. (Currently Amended) The computer readable medium of claim 22-21 wherein the method further comprises reading a plurality of logs in parallel to derive updates subsequent to the merge end point and applying the updates to the restored database data set.

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28. (Currently Amended) The computer readable medium of claim 22-21 wherein the method further comprises determining the merge end point, wherein the merge end point is reflective of a separation of detail and spill records in the log.

29. (Currently Amended) The computer readable medium of claim 22-21 wherein the method further comprises storing at least a portion of the detail records in a virtual memory.

30. (Currently Amended) The computer readable medium of claim 22-21 wherein the method further comprises generating a query to prompt for a detail record associated with the database data set.

31. The computer readable medium of claim 30 wherein the method further comprises saving the query if the detail record has not yet been read and responding to the query by applying the detail record to the backup copy if the detail record has been read.